AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, and listings, of claims

in the Application.

Listing of Claims:

Claim 1 (Currently amended): A digital video display device, comprising:

a navigation unit operative to isolate an input video signal;

a decoder operative to separate said input video signal into a plurality of

frames, each frame containing a series of fields;

a detection unit having means for generating a look-up table from

substantially all of said plurality of frames prior to processing any one of said

plurality of frames for display, said look-up table including a having entered

therein one of a plurality of processing type types associated with a corresponding

one of said plurality of frames, said plurality of processing types including a null

processing type corresponding to no predetermined processing type associated

with said corresponding frame, said detection unit further having means for

providing an indication of said processing type entry corresponding to said each

frame from said look-up table; and

a processing unit responsive operative to execute a first processing

algorithm corresponding to said indication of said processing type entry, said

processing unit for providing at an output thereof a filtered video frame from a

corresponding to one of said plurality of frames for display on a progressive

display device, wherein said first processing algorithm produces said filtered video

frame from field data of said corresponding frame and a predetermined number of

preceding frames.

Claim 2 (Previously presented): The device of Claim 1, wherein said input video

signal is isolated from a digital versatile disk (DVD) inserted into said navigation

unit.

Claim 3 – 4 (Canceled).

Claim 5 (Currently amended): The device of Claim [[4]] 1, wherein said

predetermined number of preceding frames used in said first processing algorithm

is three.

Claim 6 (Previously presented): The device of Claim 1, wherein a second

processing type entry induces execution of a second processing algorithm in said

processing unit upon said indication thereof, said second processing algorithm

producing said filtered video frame by concatenating said fields of said each

frame.

Claim 7 (Canceled).

Claim 8 (Currently amended): A digital video display system, comprising:

a navigation module operative to isolate an input video signal from a digital data stream;

a decoder operative to separate said input video into a plurality of video frames;

a detection module having means for generating a look-up table from substantially all of said plurality of video frames prior to processing any one of said plurality of frames for display, said look-up table including a having entered therein one of a plurality of processing type types associated with a corresponding one of said plurality of video frames, said detection module further having means for providing an indication of said processing type entry corresponding to said each video frame from said look-up table, said detection module further including means for user selection of processing type for said each video frame, said user selection overriding said processing type entry thereof; and

a processing module responsive to said indication of said processing type entry for providing a filtered video frame for display on a progressive display device, said filtered video frame processed in accordance with one of said processing type entry and said user selection of processing type.

Claim 9 (Previously presented): The system of Claim 8, wherein said processing module further comprises a first module operative to provide a video frame signal that is a concatenation of fields of an input video frame, and a second module operative to provide a video frame signal containing field segments having values based on the values of adjacent field segments.

Claim 10 (Previously presented): The system of Claim 8, wherein said detection module further includes means for determining the type of processing to be performed on said video frame based on field data of a predetermined number of prior video frames and said video frame.

Claim 11 (Original): The system of Claim 10, wherein the predetermined number of prior video frames is three.

Claim 12 (Currently amended): A video signal processing method, comprising the steps of:

obtaining current video information from an input video signal;

separating said input video signal into a plurality of video frames;

generating a look-up table <u>from substantially all of said plurality of video frames prior to processing any one of said plurality of video frames, said look-up table</u> having a plurality of processing type entries ~~prior to processing said plurality~~

~~of video frames, each of said processing type entries~~ respectively storing an indication of a processing algorithm for processing field data of a corresponding one of said plurality of video frames;

retrieving one of said plurality of processing type entries corresponding to one of said plurality of video frames prior to the display thereof; ~~and~~

processing said one of said video frames in accordance with said processing algorithm indicated by said corresponding processing type entry; and

selectively overriding said processing type entry in said look-up table for any of said plurality of video frames with a user selection of processing type.

Claim 13 (Canceled).

Claim 14 (Currently amended): A method of processing a video signal to remove artifacts, comprising the steps of:

(a) separating a video image frame into its component fields, ~~where a first one of said component fields is associated with a display time preceding that of a second one of said component fields~~, each of said component fields including a plurality of pixel lines;

(b) determining which of said component fields is ~~said~~ a first component field, where said first component field is associated with a display time preceding that of a second component field;

(c) selecting one of either said first component field and or said second component field of said video image frame for processing to a filtered video frame;

(d) setting pixel values of a first pixel line of said filtered video frame respectively to pixel values of a first one of said plurality of pixel lines line of said component field selected in step (c);

(e) setting said pixel values of a second pixel line of said filtered video frame respectively to pixel values of said first one of said plurality of pixel lines line of said component field selected in step (c) if said selected component field is said second component field;

(f) generating a pixel line having pixel values equal to an average of corresponding pixels in each adjacent pair of pixel lines of said selected component field; and

(g) inserting said generated pixel line between said corresponding adjacent pair of pixel lines of said filtered video frame except said first pixel line and except said second pixel line if said selected component field is said second component field.

Claim 15 (Canceled).

Claim 16 (Previously presented): The device of Claim 1, wherein said detection unit further includes means for user selection of processing type for said each frame, said user selection overriding said processing type entry thereof.

Claim 17 (Currently amended): The device of Claim 1, wherein a ~~first~~ third processing type entry induces execution of a ~~first~~ third processing algorithm in said processing unit upon said indication thereof, said ~~first~~ third processing algorithm producing said filtered video frame from a sum of scaled field data of adjacent field segments of said each frame.

Claim 18 (Canceled).

Claim 19 (Currently amended): The device of Claim 1, wherein said detection unit further includes means for determining the type of processing to be performed on said each frame based on field data in said each frame and a predetermined number of preceding frames.

Claim 20 (Previously presented): The video signal processing method of Claim 12, whereby said video frame processing step includes the step of concatenating fields corresponding to each frame when said processing type entry indicates a first processing algorithm.

Claim 21 (Previously presented): The video signal processing method of Claim 12, whereby said video frame processing step includes the steps of:

multiplying pixel values of each field line in each of said plurality of video frames by a corresponding scalar value; and

summing adjacent scaled field lines,

when said processing type entry indicates a second processing algorithm.

Claim 22 (Canceled).

Claim 23 (New): A digital video display device, comprising:

a navigation unit operative to isolate an input video signal;

a decoder operative to separate said input video signal into a plurality of frames, each frame containing a series of fields;

a detection unit having means for generating a look-up table from substantially all of said plurality of frames prior to processing any one of said plurality of frames for display, said look-up table having entered therein one of a plurality of processing types associated with a corresponding one of said plurality of frames, said detection unit further having means for providing an indication of said processing type entry corresponding to said each frame from said look-up table; and

a processing unit operative to execute a processing algorithm on said series of fields of said corresponding frame in accordance with said indication of said processing type entry and providing thereby for display on a progressive display device a filtered video frame corresponding one of said plurality of frames.

Claim 24 (New): A video signal processing method, comprising the steps of:

obtaining current video information from an input video signal;

separating said input video signal into a plurality of video frames;

generating a look-up table from substantially all of said plurality of video frames prior to processing any one of said plurality of video frames for display, said look-up table having entered therein one of a plurality of processing type entries, each of said processing type entries respectively storing an indication of a processing algorithm for processing field data of a corresponding one of said plurality of video frames;

retrieving, successively, one of said plurality of processing type entries corresponding to each of said plurality of video frames prior to the display thereof; and

processing said field data of said one of said video frames in accordance with said processing algorithm indicated by said corresponding processing type entry.